

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/529,590A
Source: PCF
Date Processed by STIC: 2/7/06

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PC

RAW SEQUENCE LISTING

DATE: 02/07/2006

PATENT APPLICATION: US/10/529,590A

TIME: 13:06:00

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\02012006\J529590A.raw

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3 <110> APPLICANT: Consortium fuer elektrochemische Industrie GmbH
5 <120> TITLE OF INVENTION: Cells Overexpressing Lipoyl-Protein Ligase-B Gene For Fermentative
6   Production of R-
7   Alpha-Liponic Acid
-> 8 <130> FILE REFERENCE: Col0219
-> 10 <140> CURRENT APPLICATION NUMBER: US/10/529,590A
-> 11 <141> CURRENT FILING DATE: 2005-03-29
13 <160> NUMBER OF SEQ ID NOS: 4
15 <170> SOFTWARE: PatentIn Ver. 2.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 679
19 <212> TYPE: DNA
20 <213> ORGANISM: Escherichia coli
22 <220> FEATURE:
23 <221> NAME/KEY: CDS
24 <222> LOCATION: (16)..(654)
26 <300> PUBLICATION INFORMATION:
27 <301> AUTHORS: Reed, Kelynn E.
28   Cronan Jr., John E.
29 <302> TITLE: Lipoic Acid Metabolism in Escherichia coli: Sequencing
30   and Functional Characterization of the lipA and lipB
31   Genes
32 <303> JOURNAL: J. Bacteriol.
33 <304> VOLUME: 175
34 <305> ISSUE: 5
35 <306> PAGES: 1325-1336
36 <307> DATE: 1993
38 <400> SEQUENCE: 1
39 cacggagatg cccat atg tat cag gat aaa att ctt gtc cgc cag ctc ggt 51
40   Met Tyr Gln Asp Lys Ile Leu Val Arg Gln Leu Gly
41   1 5 10
43 ctt cag cct tac gag cca atc tcc cag gct atg cat gaa ttc acc gat 99
44 Leu Gln Pro Tyr Glu Pro Ile Ser Gln Ala Met His Glu Phe Thr Asp
45   15 20 25
47 acc cgc gat gat agt acc ctt gat gaa atc tgg ctg gtc gag cac tat 147
48 Thr Arg Asp Asp Ser Thr Leu Asp Glu Ile Trp Leu Val Glu His Tyr
49   30 35 40
51 ccg gta ttc acc caa ggt cag gca gga aaa gcg gag cac att tta atg 195
52 Pro Val Phe Thr Gln Gly Gln Ala Gly Lys Ala Glu His Ile Leu Met
53 45 50 55 60
55 ccg ggt gat att ccg gtg atc cag agc gat cgc ggt ggg cag gtg act 243
56 Pro Gly Asp Ile Pro Val Ile Gln Ser Asp Arg Gly Gly Gln Val Thr
57   65 70 75

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59 tat cac ggg ccg ggg caa cag gtg atg tat gtg ttg ctt aac ctg aaa 291
60 Tyr His Gly Pro Gly Gln Gln Val Met Tyr Val Leu Leu Asn Leu Lys
61      80      85      90
63 cgc cgt aaa ctc ggt gtg cgt gaa ctg gtg acc ttg ctt gag caa aca 339
64 Arg Arg Lys Leu Gly Val Arg Glu Leu Val Thr Leu Leu Glu Gln Thr
65      95      100      105
67 gtg gtg aat acc ctg gct gaa ctg ggt ata gaa gcg cat cct cgg gct 387
68 Val Val Asn Thr Leu Ala Glu Leu Gly Ile Glu Ala His Pro Arg Ala
69      110      115      120
71 gac gcg cca ggt gtc tat gtt ggg gaa aag aaa att tgc tca ctg ggt 435
72 Asp Ala Pro Gly Val Tyr Val Gly Glu Lys Lys Ile Cys Ser Leu Gly
73 125      130      135      140
75 tta cgt att cga cgc ggt tgt tca ttc cac ggt ctg gca tta aac gtc 483
76 Leu Arg Ile Arg Arg Gly Cys Ser Phe His Gly Leu Ala Leu Asn Val
77      145      150      155
79 aat atg gat ctt tca cca ttt tta cgt att aat cct tgt ggg tat gcc 531
80 Asn Met Asp Leu Ser Pro Phe Leu Arg Ile Asn Pro Cys Gly Tyr Ala
81      160      165      170
83 gga atg gaa atg gct aaa ata tca caa tgg aaa ccc gaa gcg acg act 579
84 Gly Met Glu Met Ala Lys Ile Ser Gln Trp Lys Pro Glu Ala Thr Thr
85      175      180      185
87 aat aat att gct cca cgt tta ctg gaa aat att tta gcg cta cta aac 627
88 Asn Asn Ile Ala Pro Arg Leu Leu Glu Asn Ile Leu Ala Leu Leu Asn
89      190      195      200
91 aat ccg gac ttc gaa tat att acc gct taattccata catcaatggc ccaat 679
92 Asn Pro Asp Phe Glu Tyr Ile Thr Ala
93 205      210
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97 <211> LENGTH: 213
98 <212> TYPE: PRT
99 <213> ORGANISM: Escherichia coli
101 <400> SEQUENCE: 2
102 Met Tyr Gln Asp Lys Ile Leu Val Arg Gln Leu Gly Leu Gln Pro Tyr
103 1      5      10      15
105 Glu Pro Ile Ser Gln Ala Met His Glu Phe Thr Asp Thr Arg Asp Asp
106      20      25      30
108 Ser Thr Leu Asp Glu Ile Trp Leu Val Glu His Tyr Pro Val Phe Thr
109      35      40      45
111 Gln Gly Gln Ala Gly Lys Ala Glu His Ile Leu Met Pro Gly Asp Ile
112      50      55      60
114 Pro Val Ile Gln Ser Asp Arg Gly Gly Gln Val Thr Tyr His Gly Pro
115      65      70      75      80
117 Gly Gln Gln Val Met Tyr Val Leu Leu Asn Leu Lys Arg Arg Lys Leu
118      85      90      95
120 Gly Val Arg Glu Leu Val Thr Leu Leu Glu Gln Thr Val Val Asn Thr
121      100      105      110
123 Leu Ala Glu Leu Gly Ile Glu Ala His Pro Arg Ala Asp Ala Pro Gly
124      115      120      125
126 Val Tyr Val Gly Glu Lys Lys Ile Cys Ser Leu Gly Leu Arg Ile Arg

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127      130      135      140
129 Arg Gly Cys Ser Phe His Gly Leu Ala Leu Asn Val Asn Met Asp Leu
130 145      150      155      160
132 Ser Pro Phe Leu Arg Ile Asn Pro Cys Gly Tyr Ala Gly Met Glu Met
133      165      170      175
135 Ala Lys Ile Ser Gln Trp Lys Pro Glu Ala Thr Thr Asn Asn Ile Ala
136      180      185      190
138 Pro Arg Leu Leu Glu Asn Ile Leu Ala Leu Leu Asn Asn Pro Asp Phe
139      195      200      205
141 Glu Tyr Ile Thr Ala
142      210
145 <210> SEQ ID NO: 3
146 <211> LENGTH: 34
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial Sequence
150 <220> FEATURE:
151 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
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154 <400> SEQUENCE: 3
155 cacggagatg cccatâtgtâ tcaggataaa attc 34
158 <210> SEQ ID NO: 4
159 <211> LENGTH: 30
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163 <220> FEATURE:
164 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotide
165      lipB-rev
167 <400> SEQUENCE: 4
168 attgggcat tgatgtatgg aattaagcgg 30

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VERIFICATION SUMMARY

DATE: 02/07/2006

PATENT APPLICATION: US/10/529,590A

TIME: 13:06:01

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\02012006\J529590A.raw

3 M:283 W: Missing Blank Line separator, <130> field identifier
10 M:270 C: Current Application Number differs, Replaced Application Number
11 M:271 C: Current Filing Date differs, Replaced Current Filing Date